We claim:

1. A method for detecting data, comprising the steps of:

generating one or more interpolated sample sequences from said data, wherein each interpolated sample sequence has a different corresponding phase relative to said data;

generating a distance measure between a portion of each interpolated sample sequence and an ideal sample sequence, wherein said ideal sample sequence corresponds to peaks in said data;

generating signal asymmetry information for said portion of each sample sequence;

selecting a sample sequence based on said distance measures for use in detecting said data; and

adjusting said ideal sample sequence based on said signal asymmetry information.

2. The method of claim 1, wherein said data is a sample sequence read from a recording channel.

3. The method of claim 1, wherein said peak levels are used to search for an RRO address mark.

4. The method of claim 1, wherein said signal asymmetry information is a sum of values corresponding to one or more positive and negative peaks.

5. The method of claim 4, wherein said signal asymmetry information is averaged over a number of successful attempts to read said data.

6. The method of claim 4, wherein said step of adjusting said ideal sample sequence based on said signal asymmetry information comprises the step of adjusting said ideal sample sequence based on said sum.

7. The method of claim 4, wherein said sum provides an indication of a strength of said signal asymmetry.

8. The method of claim 1, further comprising the step of adjusting said ideal sample sequence based on a gain error metric.

9. The method of claim 1, wherein said data is asynchronous data.

10. The method of claim 1, wherein said data is synchronous data.

11. An apparatus for detecting data, comprising:

an interpolator adapted to generate one or more interpolated sample sequences from said data, wherein each interpolated sample sequence has a different corresponding phase relative to said data; and

a detector adapted to:

generate a distance measure between a portion of each interpolated sample sequence and an ideal sample sequence, wherein said ideal sample sequence corresponds to peaks in said data;

generate signal asymmetry information for said portion of each sample sequence;

select a sample sequence based on said distance measures for use in detecting said data; and

adjust said ideal sample sequence based on said signal asymmetry information.

12. The apparatus of claim 11, wherein said data is a sample sequence read from a recording channel.

13. The apparatus of claim 11, wherein said peak levels are used to search for an RRO address mark.

14. The apparatus of claim 11, wherein said signal asymmetry information is a sum of values corresponding to one or more positive and negative peaks.

15. The apparatus of claim 14, wherein said signal asymmetry information is averaged over a number of successful attempts to read said data.

16. The apparatus of claim 14, wherein said step of adjusting said ideal sample sequence based on said signal asymmetry information comprises the step of adjusting said ideal sample sequence based on said sum.

17. The apparatus of claim 14, wherein said sum provides an indication of a strength of said signal asymmetry.

18. The apparatus of claim 11, wherein said detector is further adapted to adjust said ideal sample sequence based on a gain error metric.

19. A method for detecting data, comprising the steps of:

detecting said data based on interpolation techniques that compute a distance measure between a portion of interpolated sample sequences and an ideal sample sequence, wherein said ideal sample sequence corresponds to peaks in said data; and

adjusting at least one sample sequence based on signal asymmetry information.

20. The method of claim 19, wherein said signal asymmetry information is a sum of values corresponding to one or more positive and negative peaks.